

GeneSat-1 Day 15 Mission Operations Summary: T = Launch + 14 days, 21 hours

C. Kitts, 12/31/06

Two contacts were executed today at ~ 2335 and 0110 PST. During these contacts, the ops team ran standard state of health procedures, and then used their remaining time to gather low-resolution post-experiment payload health, to gather additional high-resolution payload health data from the first few hours of the experiment, and to obtain high-resolution bus data for the most recent orbit.

Satellite health remains nominal. Payload temperature is holding steady at its set point of 25 degrees C, with sensor values in the 23.61 to 26.67 deg C range. Payload pressure is 14.383, and humidity is 88.175%. Bus power is nominal, there have been no CPU resets, and temperatures are as expected (the external payload enclosure temp is ~ 19.4 deg C, and solar panel temps early in eclipse are ~ 10 to 11 deg C).

Ground segment remains functional and nominal with the exception of the SRI antenna mesh damage caused by the severe windstorms on 12/26-27/06. The command channel success rate for today's 2 contacts was ~44%. The NORAD-supplied TLEs continue to change noticeably with each daily update, and those used for this day's contacts provided noticeably better performance than the first set from Day 14.

The ops team continues to practice telephone protocols with distributed team members in preparation for a smooth transition of the control node to non-SRI locations.

More than 17,200 beacon packets have been submitted to date by external amateur radio operators.

The team will not run contacts on Jan 1 due to the New Year's Day holiday.

Day 14 Mission Operations Team: Mike Rasay – command channel operator, Chris Kitts –telemetry analyst, dish tracking, and beacon channel operator. Phelps Williams– SCU beacon channel operator.